APPARATUS FOR INPUT/OUTPUT EXPANSION WITHOUT ADDITIONAL CONTROL LINES

Abstract

An apparatus for expanding I/O is described in which no additional strobes or enable lines are necessary from the host controller. By sequencing data in a specific way when output to two existing data or select lines, an expansion I/O device can generate a strobe or enable signal internally. This internal strobe or enable signal is then used to store output data or enable input data. The host controller needs software or firmware to perform the data sequencing, but no additional wires are needed, and no changes are needed to existing peripheral devices. Thus, an existing system can be expanded when there are no additional control lines available and no unused states in existing signals.